

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: 236p293

Luminaire Tested: **HBI-554T5-N-A-UNV-EHT2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 236p293
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBI-554T5-N-A-UNV-EHT2-U
Description: HBI SERIES, FULL BODY STEEL HOUSING, WITH FIVE T5HO LAMPS
NARROW DISTRIBUTION SPECULAR REFLECTOR AND STANDARD DOORFRAME
WITH PRISMATIC ACRYLIC LENS, NO UPLIGHT
Light Source: FIVE T5 HIGH OUTPUT LINEAR FLUORESCENT LAMPS, F54T5 54W - 4400 LUMENS EA
Ballast/Driver: -

Summary

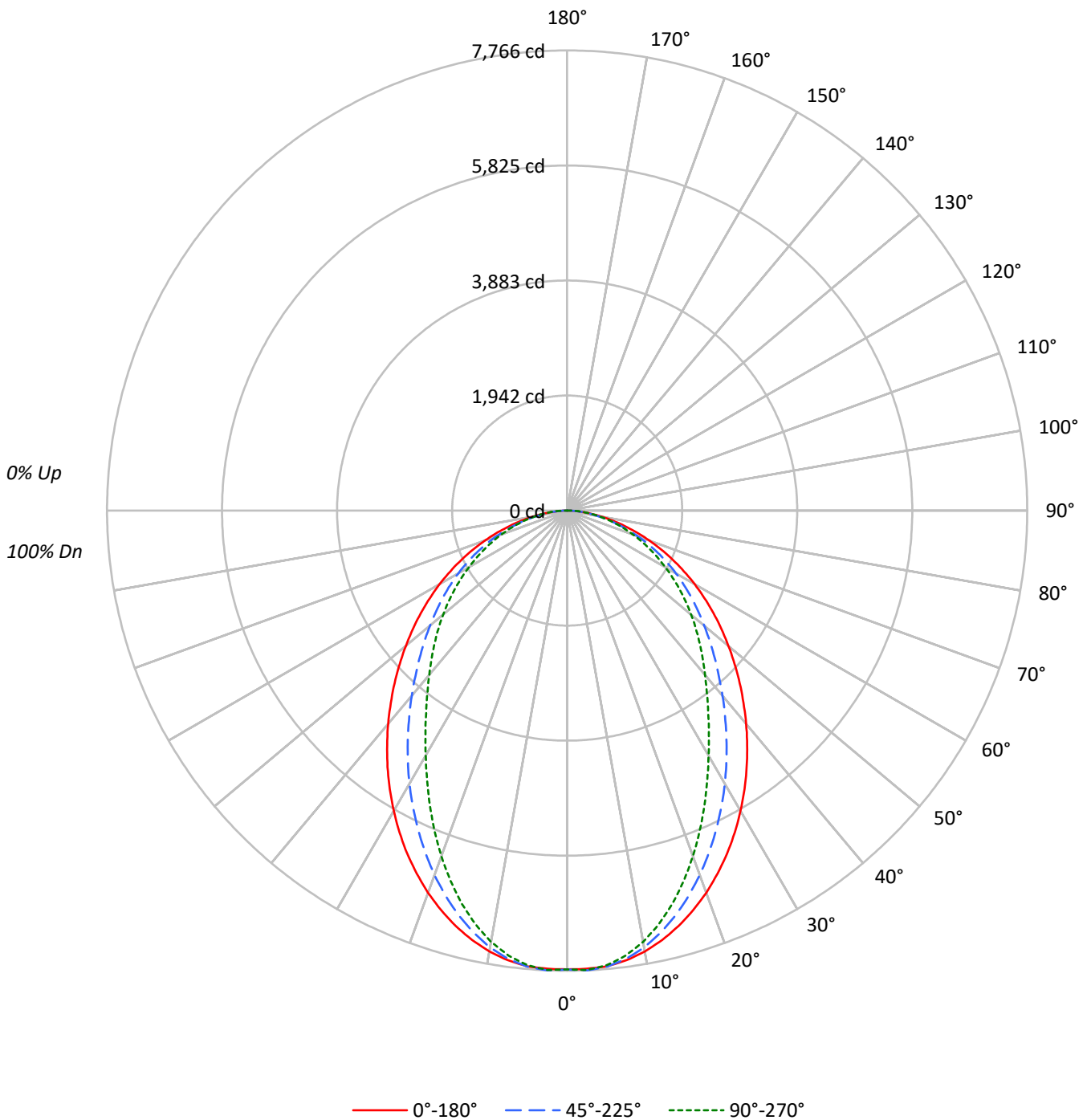
Lumens per Lamp: 4400 (5 lamps)
Luminaire Lumens: 16468.7 lumens
Efficiency: 74.9%
Efficacy: 60.3 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 0.98 / 1.15
Luminous Opening: Rectangular (W 1.23' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 273
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	89	89	89	89	87	87	87	87	83	83	83	80	80	80	76	76	76	75
1	82	79	75	73	80	77	74	72	74	71	69	71	69	67	68	67	65	64
2	75	69	64	60	73	68	63	59	65	61	58	63	60	57	60	58	56	54
3	69	61	55	51	67	60	55	50	58	53	49	56	52	49	54	51	48	46
4	63	55	48	44	62	54	48	43	52	47	43	50	46	42	49	45	42	40
5	58	49	43	38	57	48	42	38	47	42	37	45	41	37	44	40	37	35
6	54	45	38	34	53	44	38	33	43	37	33	41	37	33	40	36	33	31
7	50	41	34	30	49	40	34	30	39	34	30	38	33	29	37	33	29	28
8	47	37	31	27	46	37	31	27	36	31	27	35	30	27	34	30	26	25
9	44	34	29	25	43	34	28	24	33	28	24	32	28	24	32	27	24	23
10	42	32	26	22	41	32	26	22	31	26	22	30	25	22	30	25	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17312	17312	17312
5°	17327	17338	17284
10°	17152	16996	16780
15°	16803	16370	15900
20°	16332	15570	14766
25°	15759	14679	13524
30°	15111	13740	12323
35°	14423	12793	11325
40°	13718	11905	10566
45°	13024	11136	9995
50°	12362	10508	9506
55°	11745	9983	9024
60°	11108	9484	8572
65°	10417	8957	8137
70°	9629	8296	7720
75°	8682	7490	7317
80°	7519	6554	6889
85°	6182	5695	6978



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	729.0	4.4	3.3	0°	7743	7743	7743	7743	7743	
10°-20°	1984.0	12.0	9.0	5°	7720	7733	7725	7708	7701	731
20°-30°	2731.6	16.6	12.4	15°	7259	7216	7072	6928	6869	2042
30°-40°	2945.8	17.9	13.4	25°	6388	6271	5950	5618	5482	2937
40°-50°	2780.1	16.9	12.6	35°	5284	5143	4687	4279	4149	3303
50°-60°	2352.2	14.3	10.7	45°	4119	3979	3522	3250	3161	3180
60°-70°	1713.1	10.4	7.8	55°	3013	2883	2561	2404	2315	2695
70°-80°	955.5	5.8	4.3	65°	1969	1873	1693	1595	1538	1951
80°-90°	277.4	1.7	1.3	75°	1005	945	867	857	847	1068
90°-100°	0.0	0.0	0.0	85°	241	223	222	260	272	285
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	5444.6	33.1	24.7							
0°-40°	8390.4	50.9	38.1							
0°-60°	13522.7	82.1	61.5							
0°-90°	16468.7	100.0	74.9							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	16468.7	100.0	74.9							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7743	7743	7743	7743	7743
2.5°	7739	7762	7766	7761	7760
5°	7720	7733	7725	7708	7701
7.5°	7655	7660	7630	7592	7574
10°	7555	7547	7486	7419	7391
12.5°	7421	7396	7295	7193	7149
15°	7259	7216	7072	6928	6869
17.5°	7071	7006	6818	6628	6548
20°	6864	6779	6544	6306	6206
22.5°	6631	6531	6251	5965	5847
25°	6388	6271	5950	5618	5482
27.5°	6125	5996	5635	5265	5120
30°	5853	5719	5322	4922	4773
32.5°	5571	5431	5003	4590	4449
35°	5284	5143	4687	4279	4149
37.5°	4991	4848	4375	3987	3872
40°	4700	4558	4079	3723	3620
42.5°	4405	4265	3792	3476	3385
45°	4119	3979	3522	3250	3161
47.5°	3834	3695	3264	3032	2945
50°	3554	3419	3021	2820	2733
52.5°	3281	3148	2786	2611	2522
55°	3013	2883	2561	2404	2315
57.5°	2745	2624	2339	2197	2113
60°	2484	2369	2121	1994	1917
62.5°	2224	2119	1905	1793	1723
65°	1969	1873	1693	1595	1538
67.5°	1718	1631	1479	1403	1357
70°	1473	1396	1269	1215	1181
72.5°	1232	1166	1063	1032	1010
75°	1005	945	867	857	847
77.5°	787	737	681	689	687
80°	584	544	509	531	535
82.5°	400	371	356	388	395
85°	241	223	222	260	272
87.5°	115	108	122	159	171
90°	0	0	0	0	0

(END OF REPORT)